

Title (en)

MATERIALS HANDLING VEHICLE OBSTACLE SCANNING TOOLS

Title (de)

HINDERNISABTASTTOOLS FÜR MATERIALHANDHABUNGSFAHRZEUG

Title (fr)

OUTILS DE BALAYAGE D'OBSTACLES DE VÉHICULE DE MANIPULATION DE MATÉRIAUX

Publication

EP 3504603 B1 20220413 (EN)

Application

EP 17771915 A 20170825

Priority

- US 201662380038 P 20160826
- US 2017048612 W 20170825

Abstract (en)

[origin: US2018057049A1] A materials handling vehicle comprises an obstacle scanning tool and steering mechanism, materials handling hardware, vehicle drive mechanism, and user interface that facilitate movement of the materials handling vehicle and materials handled along a travel path. The tool establishes a scan field, a filter field, and a performance field, and is configured to indicate the presence of obstacles in the filter field and the performance field. The tool executes logic to establish the performance field in response to an input performance level, scan for obstacles in the filter field and the performance field, execute obstacle avoidance for obstacles detected in the filter field, and execute a performance level reduction inquiry for obstacles detected in the performance field wherein outcomes of the inquiry comprise reduction of the performance level when a performance level reduction is available and execution of obstacle avoidance when a performance level reduction is not available.

IPC 8 full level

G05D 1/02 (2020.01); **B66F 9/075** (2006.01); **B66F 9/24** (2006.01)

CPC (source: CN EP KR US)

B60K 35/00 (2013.01 - KR); **B60P 1/00** (2013.01 - KR US); **B60W 30/09** (2013.01 - KR US); **B60W 40/072** (2013.01 - KR); **B60W 40/105** (2013.01 - KR); **B60W 50/14** (2013.01 - KR); **B62D 6/10** (2013.01 - US); **B66F 9/063** (2013.01 - KR US); **B66F 9/0755** (2013.01 - EP KR US); **B66F 9/07568** (2013.01 - KR US); **B66F 9/24** (2013.01 - EP KR US); **G05D 1/0214** (2024.01 - CN); **G05D 1/0223** (2024.01 - CN EP US); **G05D 1/024** (2024.01 - EP US); **B60W 2300/145** (2013.01 - KR); **B60W 2520/10** (2013.01 - KR); **B60W 2540/18** (2013.01 - KR); **B60W 2552/50** (2020.02 - KR); **B60Y 2200/148** (2013.01 - KR); **B60Y 2200/221** (2013.01 - KR); **B60Y 2300/28** (2013.01 - KR)

Citation (examination)

- EP 3059650 A1 20160824 - YASKAWA DENKI SEISAKUSHO KK [JP]
- JP 2009042845 A 20090226 - PANASONIC ELEC WORKS CO LTD

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 10450001 B2 20191022; **US 2018057049 A1 20180301**; AU 2017315461 A1 20190411; AU 2017315461 B2 20211223; AU 2021286260 A1 20220106; AU 2021286260 B2 20231123; AU 2023200354 A1 20230223; AU 2023200354 B2 20240523; BR 112019003807 A2 20190521; CA 3035087 A1 20180301; CA 3035087 C 20230829; CA 3187706 A1 20180301; CA 3187706 C 20230829; CA 3187779 A1 20180301; CA 3187779 C 20231024; CA 3187819 A1 20180301; CA 3187819 C 20231003; CN 109791412 A 20190521; CN 109791412 B 20220712; CN 115268426 A 20221101; EP 3504603 A2 20190703; EP 3504603 B1 20220413; EP 3754451 A1 20201223; EP 3754451 B1 20220330; EP 4099119 A2 20221207; EP 4099119 A3 20230322; KR 102306958 B1 20211006; KR 20190039437 A 20190411; MX 2019002217 A 20190708; US 10597074 B2 20200324; US 11110957 B2 20210907; US 2020001917 A1 20200102; US 2020180690 A1 20200611; WO 2018039559 A2 20180301; WO 2018039559 A3 20180405

DOCDB simple family (application)

US 201715686606 A 20170825; AU 2017315461 A 20170825; AU 2021286260 A 20211213; AU 2023200354 A 20230123; BR 112019003807 A 20170825; CA 3035087 A 20170825; CA 3187706 A 20170825; CA 3187779 A 20170825; CA 3187819 A 20170825; CN 201780061118 A 20170825; CN 202210704305 A 20170825; EP 17771915 A 20170825; EP 20184574 A 20170825; EP 22168039 A 20170825; KR 20197008375 A 20170825; MX 2019002217 A 20170825; US 2017048612 W 20170825; US 201916569072 A 20190912; US 202016791692 A 20200214